CLAIMS

1. A method for screening and/or diagnosing cancer in a subject, which method comprises a step of detecting and/or quantifying in a biological sample of said subject, a material selected from the group consisting of:

(i) a DTD polypeptide, said DTD polypeptide comprising:

a) an amino acid sequence of SEQ ID NO: 1;

b) an amino acid sequence of SEQ ID NO: 1 having one or more amino acid substitutions, deletions or insertions;

c) a fragment of an amino acid sequence of a) or b), said fragment comprising at least ten amino acids; and

(ii) a nucleic acid molecule, said nucleic acid molecule comprising:

d) a nucleic acid sequence of SEQ ID NO: 2 or an RNA transcribed therefrom;

e) a nucleic acid sequence encoding an amino acid sequence comprising a) SEQ ID NO: 1, b) or c);

f) a nucleic acid sequence complementary to a nucleic acid sequence of d) or e);

g) a nucleic acid sequence encoding a polypeptide, wherein said polypeptide is identical to an amino acid sequence encoded by a nucleic acid sequence of d) or e); or

h) a nucleic acid sequence having substantial identity to a nucleic acid sequence of d), e), f) or g).

2. An antibody that specifically binds to at least one DTD polypeptide of claim 1.

3. The method according to claim 1 wherein the DTD polypeptide is detected and/or quantified using an antibody that specifically binds to at least one said DTD polypeptide.

4. An antibody according to claim 2 wherein the antibody is selected from the group consisting of a monoclonal antibody, a polyclonal antibody, a chimeric antibody, a humanised antibody, a bispecific antibody, and any of the foregoing conjugated to a material selected from the group consisting of a therapeutic moiety, a second antibody, a fragment of said second antibody, a cytotoxic agent, and a cytokine.

5. A method of screening for agents capable of interacting with at least one polypeptide of claim 1, said method comprising:

(a) contacting a polypeptide of claim 1 with a candidate agent; and

(b) determining if the candidate agent interacts with said polypeptide, wherein the presence an interaction identifies said candidate agent as an agent capable of interacting with said at least one polypeptide.

6. The method according to claim 5, wherein step (b) comprises quantitatively detecting binding of the candidate agent to said polypeptide.

7. A method of screening for agents capable of modulating expression of a material selected from the group consisting of a DTD polypeptide of claim 1, and a nucleic acid molecule of claim 1,

said method comprising:

a) comparing the expression and/or activity of said DTD polypeptide or the expression of said nucleic acid molecule in the presence of a candidate agent with the expression and/or activity of said DTD polypeptide or the expression of said nucleic acid molecule in the absence of the candidate agent or in the presence of a control agent; and

b) determining whether the presence of the candidate agent modulates the expression and/or activity of said DTD polypeptide or the expression of said nucleic acid molecule.

8. The method of claim 7 wherein the expression and/or activity level of said DTD polypeptide or the expression level of said nucleic acid molecule is compared to a predetermined reference range.

9. The method of claim 7 wherein step (b) further comprises selecting an agent capable of modulating the expression and/or activity of said DTD polypeptide or the expression of said nucleic acid molecule and testing said agent for use as a therapeutic or prophylactic anti-cancer agent.

10. An agent identified by the method of claim 7, wherein said agent alters the expression and/or activity of said DTD polypeptide or the expression of said nucleic acid molecule.

11. A pharmaceutical composition comprising a material selected from the group consisting of:

(i) at least one DTD polypeptide of claim 1,

(ii) a nucleic acid molecule of claim 1,

(iii) an antibody capable of binding to said at least one DTD polypeptide,

(iv) an agent which modulates the expression and/or activity of said at least one DTD polypeptide or said nucleic acid molecule; and

(v) one or more of the above together with at least one of pharmaceutically acceptable excipients, carriers and diluents.

12. A pharmaceutical composition of claim 11 comprising the at least one DTD polypeptide, wherein the pharmaceutical composition is a vaccine.

13. A method for prophylaxis and/or treatment of cancer in a subject, said method comprising administering to said subject a therapeutically effective amount of a material selected from the group consisting of:

(i) at least one DTD polypeptide of claim 1,

(ii) a nucleic acid molecule of claim 1,

(iii) an antibody capable of binding to said at least one DTD polypeptide, and

(iv) an agent which modulates the expression and/or activity of said at least one DTD polypeptide or said nucleic acid molecule.

14. A medicament for use in prophylaxis and/or treatment of cancer, said medicament comprising a material selected from the group consisting of:

(i) at least one DTD polypeptide of claim 1,

(ii) a nucleic acid molecule of claim 1,

(iii) an antibody capable of binding to said at least one DTD polypeptide, and

(iv) an agent which modulates the expression and/or activity of said at least one DTD polypeptide or said nucleic acid molecule.

15. The pharmaceutical composition of claim 11 wherein the cancer is breast cancer.

16. The pharmaceutical composition of claim 12 wherein the cancer is breast cancer.

17. The method of claim 13 wherein the cancer is breast cancer.

18. The medicament of claim 14 wherein the cancer is breast cancer.